

# Super Fast Recovery Diode

## RF505B6S

●Series

Standard Fast Recovery

●Applications

General rectification

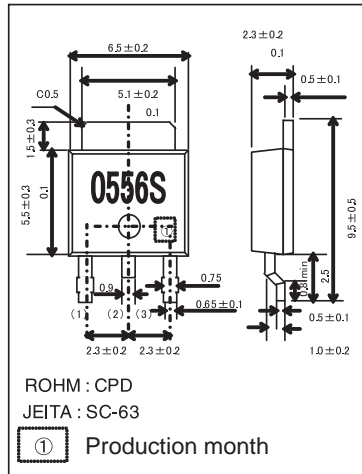
●Features

- 1)Power mold type. (CPD)
- 2)High switching speed
- 3)Low Reverse current

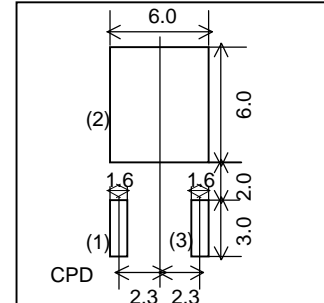
●Construction

Silicon epitaxial planar

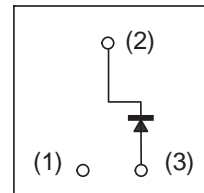
●Dimensions (Unit : mm)



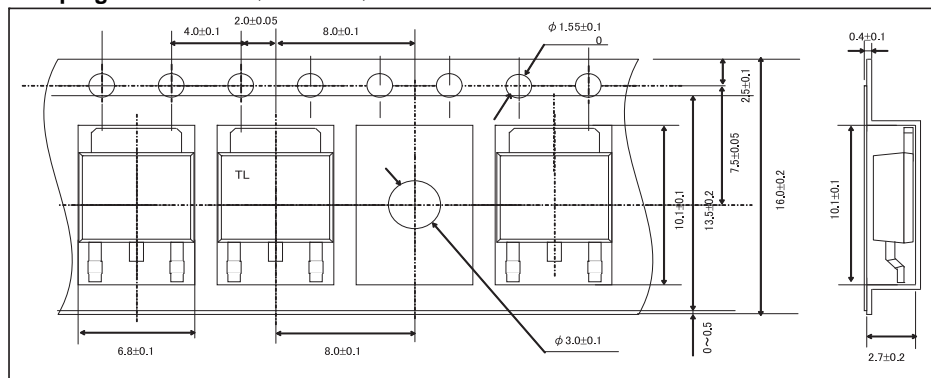
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



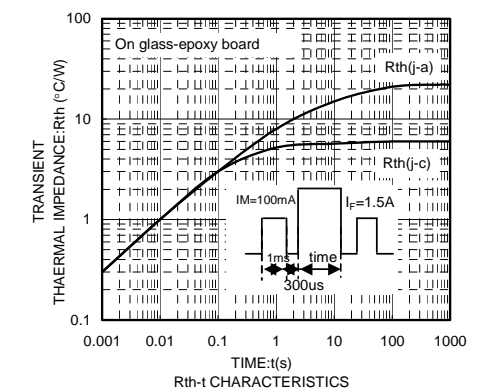
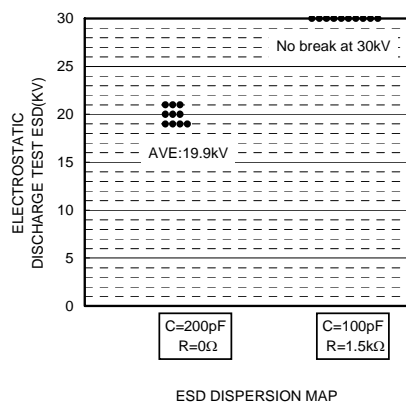
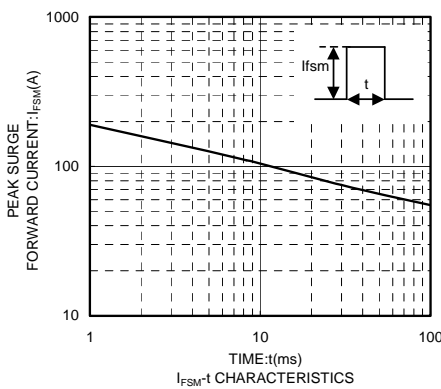
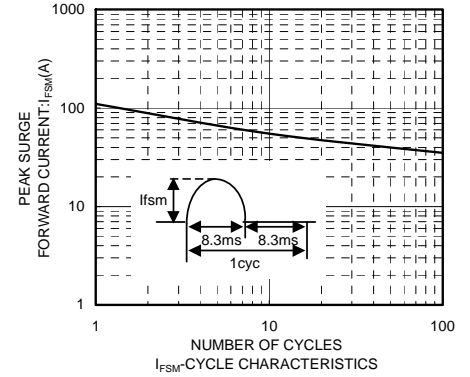
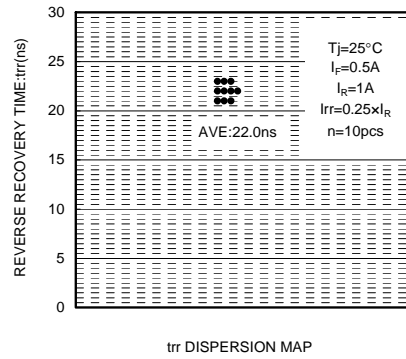
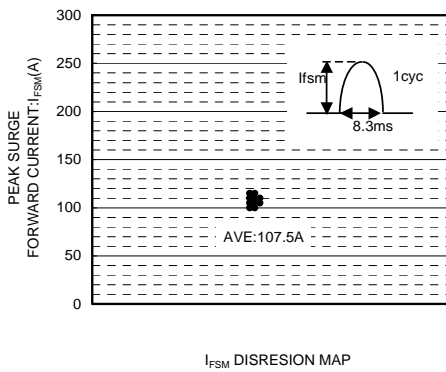
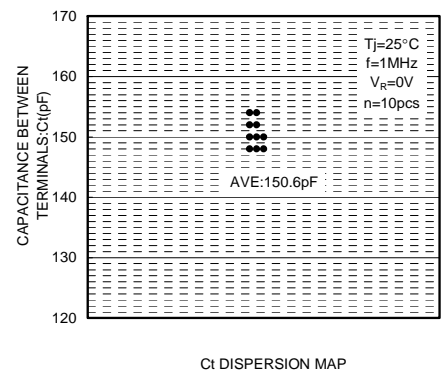
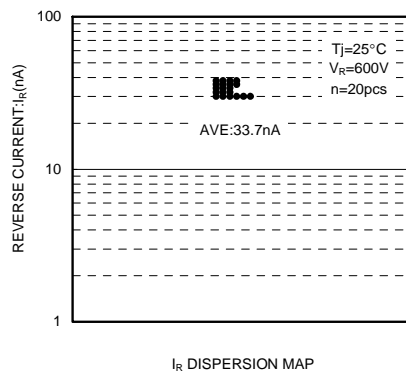
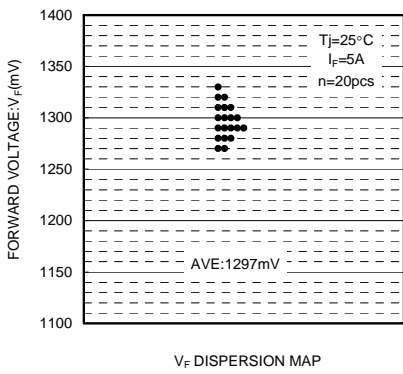
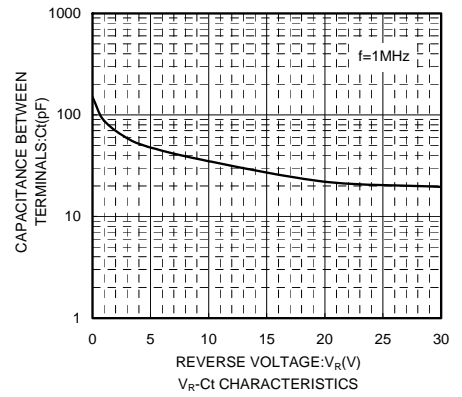
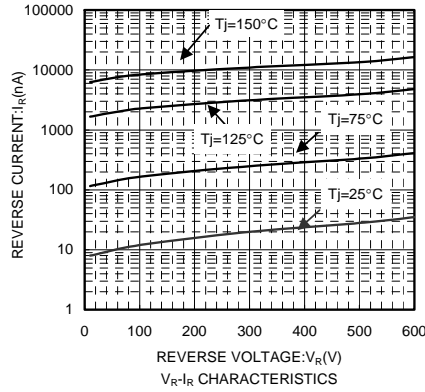
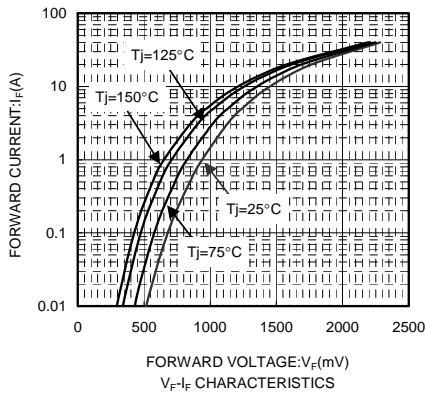
●Absolute maximum ratings (Tc=25°C)

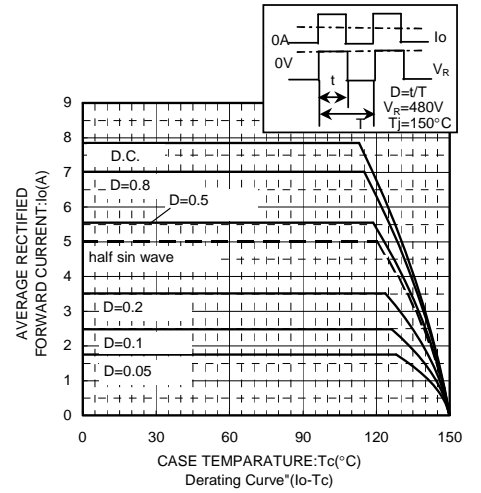
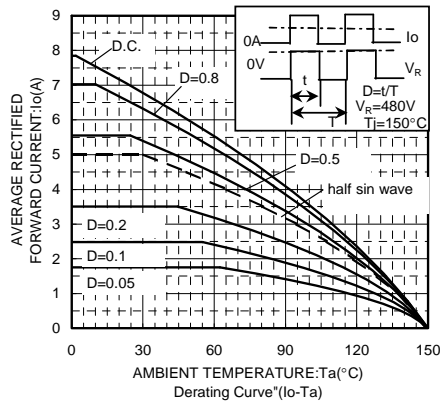
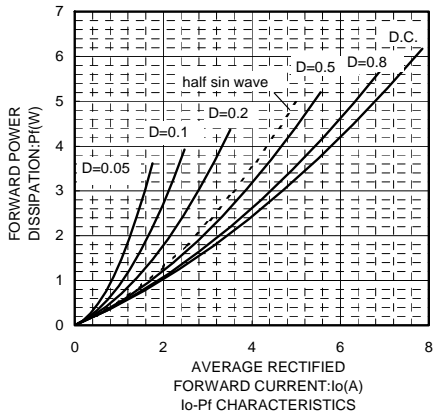
Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak Reverse voltage	$V_{RM}$	Duty $\leq$ 0.5	600	V
Reverse voltage	$V_R$	Direct voltage	600	V
Average rectified forward current	$I_o$	60Hz half sin wave, resistive load   Tc=42°C	5	A
Forward current surge peak	$I_{FSM}$	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C	50	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		-55 to +150	°C

●Electrical characteristics(Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F=5.0A$	-	1.3	1.7	V
Reverse current	$I_R$	$V_R=600V$	-	0.05	10	$\mu A$
Reverse recovery time	trr	$I_F=0.5A, I_R=1A, I_{rr}=0.25 \times I_R$	-	22	30	ns
Thermal resistance	Rth(j-l)	junction to lead	-	-	12	°C/W

●Electrical characteristic curves





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